

Thomas Hatzopoulos

EXPERIENCE

- **Bioinformatics Scientist** Chicago, IL
Tempus January 2019 - Present
 - **Software Engineer:** Currently working on the Bioinformatics team building new tools, while improving and supporting existing software.
- **Teaching Assistant** Chicago, IL
Loyola University Aug 2017 - December 2019
 - **Computational Biology:** Taught students to analyze primary literature in the field of bioinformatics and computational biology while also learning to design and implement advanced data structures and algorithms.
 - **Computer Science :** Involved in creating assignments, exams, and conducting meetings for a variety of courses including Theory of Programming Languages and Operating Systems Development.
- **Web Developer** Chicago, IL
Loyola University May 2018 - September 2018
 - **Healing Earth IJEP Site:** Maintained and updated a Drupal site for the International Jesuit Ecology Project.
- **Instructor** Chicago, IL
Loyola University Aug 2017 - May 2018
 - **BIOI 397: Bioinformatics Research Survey Course:** Instructor of record for Bioinformatics Research Survey course (BIOI 397), an undergraduate course in which students learn to assemble, annotate, and analyze bacterial genomes. Introduced the fundamentals of BLAST searches, phylogenies, genome assembly and genome annotation tools.
- **Research Assistant** Chicago, IL
Loyola University Jan 2012 - Dec 2016
 - **Research Assistant - Bioinformatics:** Creation and use of computational pipelines to extract and isolate specific viral sequences from Lake Michigan sequence data. Design and development of noSQL database for efficient querying of genetic data via RESTful web service. Development/refinement of pipeline for user-friendly analysis of microbiome sequence data.
- **Environmental Web Application Developer** Chicago, IL
Loyola University Aug 2015 - May 2016
 - **Clean Air Clean Water Database:** Assembly of database including physical, biological, and chemical measurements across the Chicago Area Waterway System using Django, Python, and Javascript

EDUCATION

- **Loyola University Chicago** Chicago, IL
Master of Science in Computer Science; GPA: 3.75 Aug. 2017 - Dec. 2018
- **Loyola University Chicago** Chicago, IL
Bachelor of Science in Computer Science Aug. 2012 - July. 2016

PEER REVIEWED JOURNAL PUBLICATIONS

- **Phage Phisher: a pipeline for the discovery of covert viral sequences in complex genomic datasets:** Hatzopoulos, T., Watkins, S.C., Putonti, C. *Microb Genom*, 2, e000053.
- **A polyglot approach to bioinformatics data integration: A phylogenetic analysis of HIV-1:** Reisman, S., Hatzopoulos, T., Laufer, K., Thiruvathukal, G., Putonti, C. 2016. *Evol Bioinform Online*, 12, 23-27.
- **Assessment of microbial populations within Chicago area nearshore waters and interfaces with river systems:** Sible, E., Cooper, A., Malki, K., Bruder, K., Hatzopoulos, T., Watkins, S., Putonti, C. 2015. *Data Brief*, 5, 305-308.
- **Bacteriophages isolated from Lake Michigan demonstrate broad host-range across several bacterial phyla:** Malki, K., Kula, A., Bruder, K., Sible, E., Hatzopoulos, T., Steidel, S., Watkins, S.C., Putonti, C. 2015. *Virology J*, 12, 164.

PROJECTS

- **PhagePhisher:** <http://www.putonti-lab.com/phagephisher.html>
- **PhageRage:** <https://github.com/thatzopoulos/phage-rage>
- **Peasant:** <https://github.com/thatzopoulos/peasant>
- **Healing Earth:** <https://healingearth.ijep.net/>

PROGRAMMING SKILLS

- **Languages/Skills :** Python, Rust, Javascript, AWS, SQL, Docker, C++, Linux System Administration